

Editorial

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Next Generation Library Systems

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The development of library management systems is amazing. In the eighties, libraries in Europe started to implement hardware and software systems to optimize their processes and working procedures. After a period of several hundred years the librarians' work turned from the manual operation of acquisition, cataloguing and circulation to automatized workflows. In this period of the development the libraries used their systems just for themselves and haven't been connected for any cooperation. Due to the pretty fast establishment of reasonable connectivity the capabilities for working with common databases have been tackled very soon. It was the beginning of the rather quick development of library networks. The cataloguing procedures for books and journals were more and more centralized in regional or national databases. Interlibrary loan switched from large card catalogues to the computerized handling of the loan requests – in other words: shared cataloguing and resource sharing. The digitization of libraries started with the introduction of library management systems. The developments were heavily appreciated by librarians and users, because the search and delivery processes of books and journals were much more comfortable than before.

A number of bigger and smaller companies came up, which provided systems for academic and public libraries in Europe and the United States. Meanwhile, there are only a few commercial players on the market place, which was a niche market from the very beginning, after smaller companies have been merged with the bigger ones. Worldwide, most of the systems are commercial products and have a proprietary architecture. Existing open source systems are implemented in a number of libraries, but they don't play a crucial role. A similar situation can be observed for the library networks. These regional and national networks developed to service hubs supporting the libraries with technological expertise, administration, and maintenance of the network catalogues including additional services like interlibrary loan, management of metadata and provisioning of authority, and master files as well

as data sets from different sources like the bibliographic data of national libraries, big publishers or other relevant data important providers. For the librarians the implementation of library management systems opened up completely new perspectives. They learned a lot about data formats, metadata management, and information retrieval and got familiar with the paperless world of catalogues, which were called Online Public Access Catalogue (OPAC). The librarians' skills and their work have deeply changed compared to their handwork-like procedures before.

The impact of the internet and the unbelievable success story of Google challenged the role of libraries heavily. Because of new internet technologies Google was going on to be ahead of the libraries. This situation persists until today. But from this background libraries and providers of library systems made many efforts to improve the search facilities for libraries with the new google-like discovery systems. At the same time, the phase of designing and developing the features of the next generation systems started. Today the new systems are available and – more or less – ready for application. At the first glance, the new systems don't seem to be very different from the running systems. But there are new challenges closely connected with the "cloud" as the new system environment, the increasing standardization of workflows, the internationalizing of the metadata management and the evolving digital resources, which have to be processed now and in future. How will these topics change the landscape of libraries and library networks? What are the opportunities and the risk of the next generation library systems?

In this issue of "Bibliothek – Forschung und Praxis" colleagues from Austria, Finland, France, and Norway report their approaches and strategies about their next generation library systems. In the following issue colleagues from Sweden will continue with the subject. The articles address and discuss the following challenges, questions and topics to explain the different perspectives:

- (1) What is the current situation in the country? What are the aims and objectives of the migration to the next generation library systems from the countries' background?
- (2) What are the biggest advantages of the new systems? Which challenges are connected with the cloud-based scenarios?

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- (3) Which decision criteria have been applied for the system's choice? Have the libraries been involved in the decision process?
- (4) What is the impact of the system migration concerning standardization of applications and workflows in libraries? In which way did you manage bigger changes and related reluctances?
- (5) How do you pick up and solve the challenges of data protection, data security and the ownership of data?
- (6) What is new with the management of bibliographical metadata, local data incl. holding/licence information and the usage of authority files? Are the new cataloguing environments influencing the practice of cataloguing?
- (7) Are library networks in the situation to rethink their roles and tasks with the perspective, that the new systems have the capability to provide the network databases in the companies' clouds?
- (8) Do the next generation systems facilitate and improve the cooperation between European libraries? What about library clouds or indexes for the European landscape of libraries?

The editors of "Bibliothek – Forschung und Praxis" are very thankful to the authors for their contributions sharing their considerations and outlining the developments in their countries. To give insights and overviews about application and implementation of the next library systems we can improve the cooperation of libraries and librarians in Europe and beyond Europe.



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